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Geosmin and Methyl-IsoBorneol (MIB)

Why does my water smell “earthy” or “musty”?

Geosmin and Methyl-Isoborneol (MIB) are naturally occurring compounds that have a very strong, earthy taste and odor. Geosmin can be detected by human noses at very low levels.

Although these compounds are generally present in drinking water, they are generally not at noticeable levels.

Generally, Geosmin becomes an aesthetic issue for customers when levels are in the range of 20-30 nanograms (one millionth of a milligram) per liter, but some people who are particularly sensitive may notice it at levels above 10.

What are the Effects of Geosmin and MIB?

Geosmin and MIB produce a musty, earthy smell and taste in drinking water. These compounds are not considered harmful at levels present in drinking water.

What Causes Increased Levels of Geosmin and MIB?

Some kinds of algae and bacteria present in reservoirs naturally produce Geosmin and MIB. Increased concentrations of these microorganisms can cause an increase in Geosmin and MIB concentrations above the taste and odor threshold.

What Can be Done About Geosmin and MIB?

Geosmin and MIB cannot be removed from water using normal treatment processes.

During times of increased geosmin and MIB levels, the City of Burlington may reduce the amount of water drawn from the affected water source.

Customers can add lemon juice and chill water with increased geosmin and MIB levels to improve the taste.